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(54) Title: HIGH PRESSURE LIQUID ABRASIVE DE-BURRING SYSTEM AND PROCESS FOR SAME

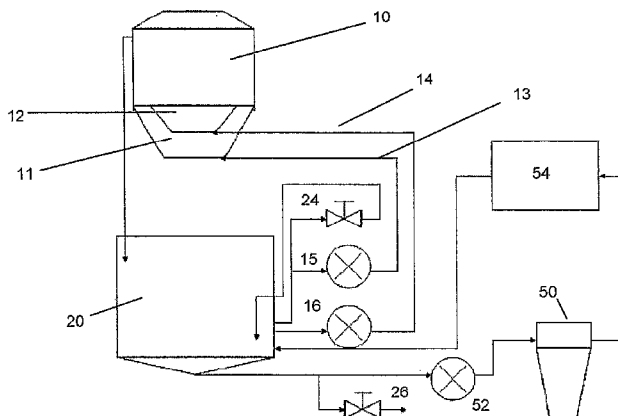


FIG. 3

(57) Abstract: A high pressure liquid system using a plurality of different types of abrasive media (42) at progressive stages to de-burr and polish the work pieces (40) in a processing tank (10). The system has two or more pressure chambers (11,12) and ejecting means by which liquid is forced out at high pressure from the pressure chambers (11,12). Under high liquid pressure, the work pieces (40) and the abrasive media (40) placed at the bottom of the processing tank (10) is firstly lifted. The high pressure liquid also creates a horizontal centripetal force and an upward gravity neutralization force to grind the burrs and polish the surfaces of the work pieces (40). The system includes a filtration system (50), a cooling system (54) and a programmable controller which allows continuous de-burring until the work pieces (40) have been polished to meet finishing requirements.

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